



- ❑ **TEIN4 Budget Status**
- ❑ **Comments from the TEIN4 Evaluation**
- ❑ **Updates on TEIN4 Activities on 2016**
 - ❖ WP1: TEIN4 Network, TEIN PoP/NOC/Equipment, Feasibility Study
 - ❖ WP2: Promoting & Supporting Applications, Marketing & Visibility
 - ❖ WP3: HRD/Training, International Collaboration
- ❑ **Future Plans**
 - ❖ Activity plan for remaining TEIN4 period
 - ❖ The next phase of TEIN : Asi@Connect



TEIN4 Budget Status



- ❖ Actual Expenses of EC fund – Grant Contract (2011/281-226)
 - Period : April 2012 ~ July 2016 (52 months / 56 months)
 - Actual Expenditure : 7.34M / 8.00M Euro (91.68%) (dated on 29 July 2016)
 - ✓ Included the total expenditure submitted by new application project organizers
- ❖ Approved TEIN4 Extension by November 2016 in order to use up all EC funding of 8M Euro.

❑ Audit Results

- ❖ External Auditors from the EC visited to TEIN*CC
 - TEIN*CC had successfully done an external EC audit for TEIN4 project (April 2012 ~ December 2014) from 11 to 24 February 2016.
 - TEIN*CC received ***the unqualified opinion*** from the auditor, which says the financial report presents fairly, in all material respects, the actual expenditure incurred and revenue received for the Project including the project funds provided by EC for the period from 2 April 2012 to 31 December 2014 in conformity with the applicable Contractual Conditions.
- ❖ Annual Audits by E&Y was completed.
 - For the 4th pre-financing (January ~ December 2015): on 14th - 16th March 2016
 - For MSIP budget on 2015: on 17th – 18th March 2016
 - For TEIN*CC Organization: on 16th – 19th May 2016



LESSONS LEARNT, COMPLEMENTARITY AND CROSS-CUTTING ISSUES



- An evaluation of TEIN-4 (February 2016) notes that the project has proven to be highly successful ASEM initiative.

- ❖ Some other conclusions of the TEIN-4 evaluation report are:
 - The transition in TEIN management from an EU organisation GÉANT (formerly DANTE) to a newly created Korean organisation TEIN*CC in 2012 has been overall smooth;
 - The role played by the Steering Committee and the Governor's Meetings in easing the transition path demonstrates the knowhow and experience of those involved and should be seen as an best practice;
 - The performance of TEIN*CC in upgrading and extending the network, managing network traffic and other technical issues has been extremely satisfactory;
 - TEIN*CC's capacity needs to be strengthened in areas including communication/marketing/public relations and financial planning.



ENHANCING FINANCIAL AND COMMUNICATION ABILITY



- ❖ TEIN*CC has already carried out website content improvements including
 - ✓ a) making the homepage more compelling
 - ✓ b) linking off to NREN resources (such as the Case for NRENs portal and the “In the field with R&E networks” impact marketing blog which showcases application case study material around the world, including TEIN related case studies)
 - ✓ c) having a dedicated user section in the main navigation populated with case studies giving explicit guidance for institutions and researchers on how to actually connect to the network; and
 - ✓ d) improving the media centre to make access to existing marketing collateral and a bespoke press kit easier (see www.tein.asia).
- ❖ For capacity development/training of TEIN*CC staff, TEIN*CC will implement staff trainings under the Asi@Connect project, and may contract GÉANT to obtain technical advice and assistance as required.



TEIN4 Activities on 2016

- *TEIN4 Network, NOC/PoP/Equipment* -



□ TEIN4 Connectivity Updates

- ❖ Beijing (HK – BJ) link upgraded from 1G to 10G during July 2016
- ❖ Europe (MB – EU) link upgraded from 2.5G to 10G during June 2016
- ❖ Malaysia (SG-MY) link upgraded from 622M to 1G during June 2016
- ❖ MB – SG link upgraded from 2.5G to 10G during March 2016
- ❖ Thailand (HK – TH) installation of new link is under way, target to complete by August 2016
- ❖ Afghanistan (SG-AF) link transition from NATO backed to TEIN supported is underway
 - ✓ National Procurement Authority (NPA) of AF is under internal review of the procurement tender procedure already completed by TEIN*CC.

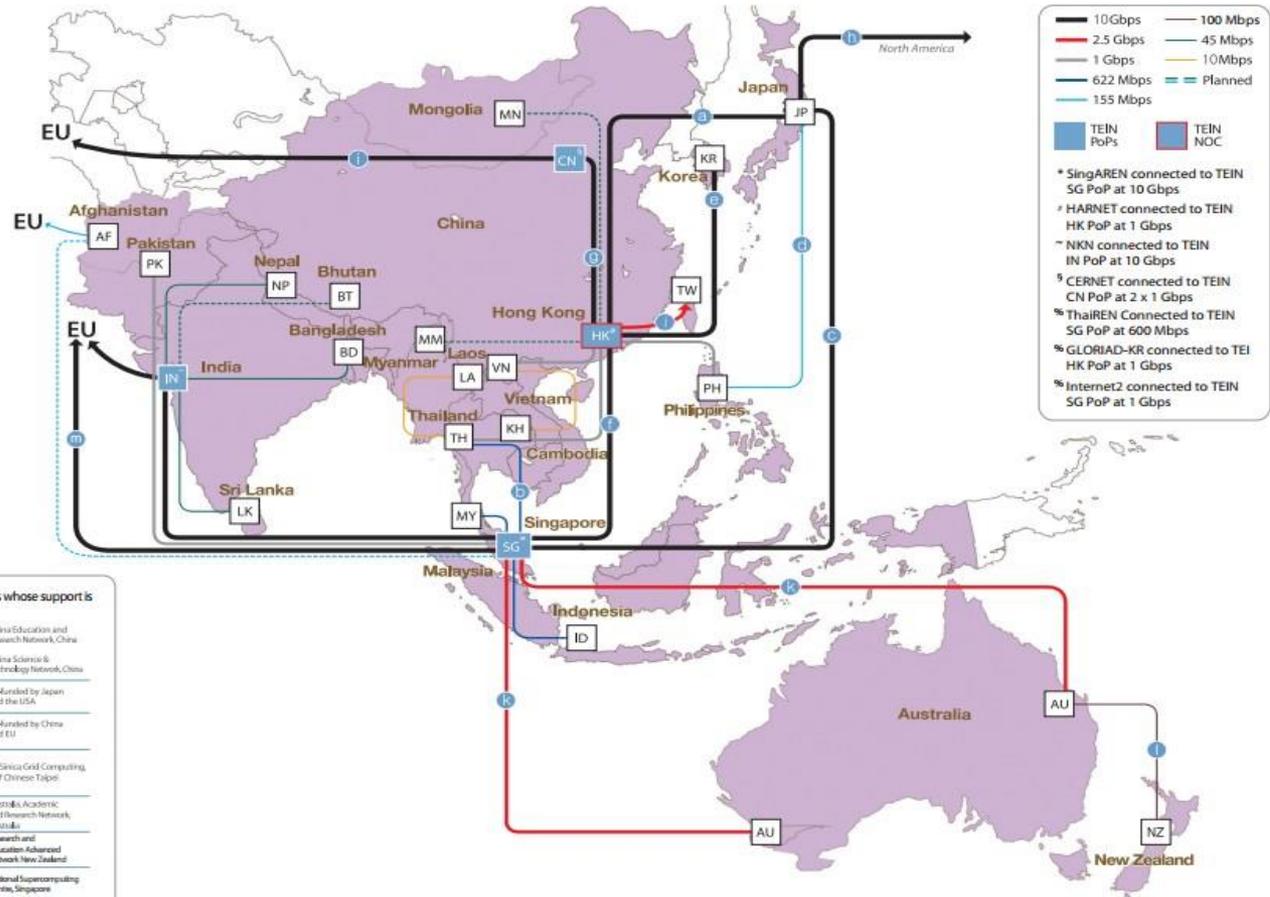


TEIN4 Network Topologies

- As of July 2016 -



Connecting Asia and Europe's Research and Education Communities
www.tein.asia



TEIN Project Partners

AF	Afghanistan	ID	Indonesia	NZ	New Zealand
AU	Australia	JP	Japan	PK	Pakistan
BD	Bangladesh	KR	Korea	PH	Philippines
BT	Bhutan	LA	Laos	SG	Singapore
KH	Cambodia	MM	Myanmar	LK	Sri Lanka
CN	China	MN	Mongolia	TH	Thailand
HK	Hong Kong	MY	Malaysia	TW	Taiwan
IN	India	NP	Nepal	VN	Vietnam

The following links are fully financed/co-financed by the link owners whose support is gratefully acknowledged

a	NICT National Institute of Information and Communications, Japan	g	CERNET China Education and Research Network, China
b	National Institute of Information and Communications, Japan	h	TREC China Science & Technology Network, China
c	NII National Institute of Informatics, Japan	i	ORIENT Orient, co-funded by China and EU
d	MAEFTN Ministry of Agriculture, Forestry and Fisheries Research Network, Japan	j	ASCC Academia Sinica Grid Computing, Republic of Chinese Taipei
e	NIA National Information Society Agency, South Korea	k	ANIRNET Australia Academic and Research Network, Australia
f		l	REANNZ Research and Education Advanced Network New Zealand
		m	NSCC National Supercomputing Centre, Singapore

As of August 2016



TEIN is co-funded by the European Commission through the Directorate-General for Development and Cooperation-EuropeAid

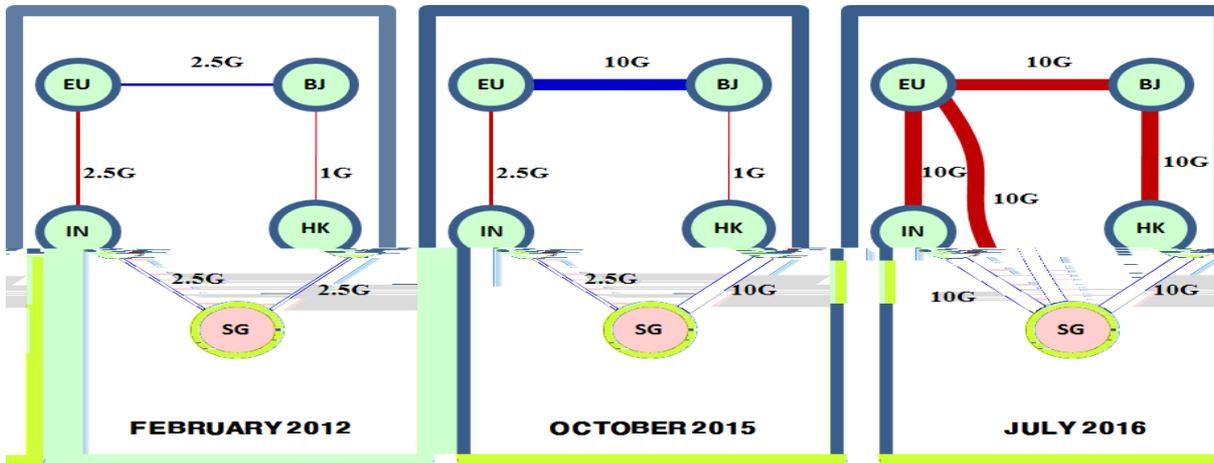
This map has been produced with the financial assistance of the European Union. The contents of this document are the sole responsibility of TEINCC and can under no circumstances be regarded as reflecting the position of the European Union.



Evolution of the TEIN4 Backbone and Traffic



❖ Evolution of the TEIN4 Backbone (EU, BJ, HK, SG & IN)



TEIN Monthly Total Traffic Volume(Inbound, TB)



TEIN Monthly Total Traffic Volume(Outbound, TB)



TEIN4 Activities on 2016

- Applications, HRD/Trainings, TEIN NOC Workshop -



□ 6 Application Workshops

Country	Title	Date
Malaysia	Tele-Learning Of Community Health Skills (TELCOHS)	06 Jan 2016 (done)
Singapore	Joint APAN-TEIN 3rd Dengue Fever and Healthcare	24 Jan 2016 (done)
Hong Kong	TEIN Cyber Performance (TCP) 2016	1 August
Nepal	Telemedicine	9-10 September
Malaysia	TEIN eCulture Youth Exchange Workshop: TEIN-ECX	TBA
NSCC	Introduction to Petascale HPC - "SuperASTRENA"	TBA



TEIN4 Activities on 2016

- Applications, HRD/Trainings, TEIN NOC Workshop -



❑ Tele-Learning Of Community Health Skills (TELCOHS) (06 Jan 2016, Malaysia)



❑ Joint APAN-TEIN 3rd Dengue Fever and Healthcare (24 Jan 2016, Singapore)





TEIN4 Activities on 2016

- Applications, HRD/Trainings, TEIN NOC Workshop -



- ❑ **Status of new TEIN4 Application/Training Projects (Total 1.44 M Euro by Nov. 2016)**
 - ❖ **Collaborations between doctors and engineers for both international and domestic expansion (Kyushu University, 520K Euro)**
 - ✓ APAN Medical WG meeting(PH) & engineering workshop successfully held in January
6 Trainers and 21 trainees in 7 countries(TH, MY,VN, ID, TW, NP, BD) supported
 - ✓ Gastric Cancer Camp (TH) held in February
22 Doctors and nurses participated from 4 countries(VN, PH, MM, JP) supported
 - ✓ 5 MDs(IN, VN, TH, ID) supported in one-month training in TEMDEC
 - ✓ Domestic expansion meeting in Philippines-Surgery held in July
 - ✓ APAN Medical WG meeting (HK) and collaboration workshop with Indonesian endoscopy scheduled in August, and one-month training at TEMDEC planned by September
 - ❖ **Global Medical Education Centre program on Characteristics of Minimal Invasive Surgery (SNUBH, 177K Euro)**
 - ✓ 5 Tele-lecture and 1 live surgery held until March
4 countries (NP, IN, PK, ID) 10 institutes participated (total of 172 participants)
 - ✓ 7 Tele-lectures and 3 live surgery planned (July to September)
Participating countries expected to expand to Malaysia, Thailand, and more



TEIN4 Activities on 2016

- Applications, HRD/Trainings, TEIN NOC Workshop -



❑ Status of new TEIN4 Application/Training Projects (Total 1.44 M Euro by Nov. 2016)

❖ Extending eduroam in the Asia Pacific (AARNet, 350K Euro)

- ✓ All the relevant equipment delivered to 7 participating countries and well deployed
- ✓ Setup of local websites for eduroam finished in 5 countries (ID, MY, NP, PK, LK)
- ✓ Institutional training for local expansion held in Sri Lanka in May
- ✓ Further deployment required for local radius server, admin and monitoring tools

❖ Campus Network Training (NSRC, 387K Euro)

- ✓ Philippines (20-22 Jan.), Nepal (25 Jan. – 1 Feb.), Laos (14-18 Mar.), Myanmar (6-10 June)
- ✓ Bangladesh, Bhutan, Mongolia planned



TEIN4 Activities on 2016

- Applications, HRD/Trainings, TEIN NOC Workshop -



□ 9 HRD/Trainings

Country	Title	Date
Philippines*	PREGINET Routing/BGP/IXP Workshop	20-22 January 2016 (done)
Philippines	3rd Joint TransPAC4-APAN-TEIN- Internet2 perfSONAR Training Workshop	25 Jan 2016 (done)
Nepal*	SANOG27 Virtualization and Cloud Training	25 Jan - 1 Feb '16 (done)
Laos*	LERNET Campus Network Design & DEA	14-18 March 2016 (done)
Bangladesh	Revitalizing Research in Higher Education	18-19 April 2016 (done)
Myanmar*	Technical Capacity Building training	6-10 June 2016 (done)
Mongolia*	Mongolia ERDEMNET - DEA	TBA
Bhutan*	DrukREN – 2 nd DEA	TBA
TBA	2015 TEIN Annual NOC workshop	TBA

* The programs collaborate with NSRC



TEIN4 Activities on 2016

- Applications, HRD/Trainings, TEIN NOC Workshop -



❑ PREGINET Routing/BGP/IXP Workshop (20-22 January 2016, Philippines)



❑ 3rd Joint TransPAC4-APAN-TEIN-Internet2 perfSONAR Training Workshop (25 Jan 2016, Philippines)





TEIN4 Activities on 2016

- Applications, HRD/Trainings, TEIN NOC Workshop -



❑ SANOG27 Virtualization and Cloud Training (25 Jan - 1 Feb 2016, Nepal)



❑ LERNET Campus Network Design & DEA (14-18 March 2016, Laos)





TEIN4 Activities on 2016

- Applications, HRD/Trainings, TEIN NOC Workshop -



□ Revitalizing Research in Higher Education (18-19 April 2016, Bangladesh)



□ Technical Capacity Building training (6-10 June 2016, Myanmar)





Future Plans

- Activity plan for remaining TEIN4 period -



❑ **WP1: Network, PoP/NOC/Equipment, Feasibility Study**

- ❖ TEIN4 connectivity procurement (AF, MN & MM).
- ❖ TH 1G procurement
- ❖ Procurement and replacement of backbone routers in TEIN HK and SG
- ❖ Upgrade of current Network Monitoring System.

❑ **WP2: Promoting and Supporting Applications, Marketing & Visibility**

- ❖ Conduct four scheduled Application workshops feasible and relevant to the project.
- ❖ Produce suitable new case studies (at least one).

❑ **WP3: HRD/Training, International Collaboration**

- ❖ Conduct scheduled HRD/Trainings including TEIN Annual NOC Workshop
- ❖ Further collaborate with international R&E networks to expand TEIN's reachability and opportunity of beneficial applications.
- ❖ Take a role in the MAGIC project led by RedClara as one of worldwide 20 partners.



Future Plans

- The next phase of TEIN : Asi@Connect -



❑ **TEIN4 Extension**

- ❖ TEIN4 project period has been extended by November 2016 (48 months → 56 months).

❑ **The next phase of TEIN Project : Asi@Connect**

- ❖ Asi@Connect (successor to Trans-Eurasia Information Network – TEIN)
CRIS number: **2015/038-230** financed under the Development Cooperation Instrument
- ❖ Afghanistan, Australia, Bangladesh, Bhutan, Cambodia, China, Chinese Taipei, Hong Kong, India, Indonesia, Japan, Korea, Laos, Malaysia, Mongolia, Myanmar, Nepal, New Zealand, Pakistan, Philippines, Singapore, Sri Lanka, Thailand, Vietnam. (Other Asian countries may join during the course of Asi@Connect.)
- ❖ Total estimated cost: EUR 36.835.000
Total amount of EU budget contribution EUR 20.000.000



TEIN Cyber Performance 2016 (TCP16)



TEIN Cyber Performance 2016(TCP16)

@ Grand Hall, HKU Centennial Campus

Hong Kong SAR, China





Contacts



Thank you for your attention !

www.teincc.org

www.tein.asia